Exhibit 7

Insulin is too expensive for many of my patients. It doesn't have to be.

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At age 15, I developed an unquenchable thirst and frequent urination, and lost 20 pounds. I had developed Type 1 diabetes, an autoimmune disease that destroyed my body's ability to produce insulin. Without insulin, I would have eventually developed a condition called diabetic ketoacidosis, which is lethal without (and even sometimes with) treatment.

Years later, I'm a practicing endocrinologist. I could never have imagined back when I first started taking insulin that one day I would have so many patients who could not afford the medication because of skyrocketing prices. When the drug was discovered in 1921, the original patent was sold to the University of Toronto for \$1 so that no one else could patent it and "secure a profitable monopoly."

Numerous improvements later, insulin is produced by a three-company oligopoly. When the first of the newer insulin "analogs," Humalog, hit the market in 1996, it sold for \$21 a vial. Today, vials of analog insulins, including Humalog, sell for about \$300. Patients with Type 1

diabetes typically require two or three vials of insulin per month, but patients who are more resistant to insulin, such as those with Type 2 diabetes, may require six or more.

A recent paper in the Journal of the American Medical Association found that insulin nearly tripled in cost from 2002 to 2013. A lawsuit filed in January accuses insulin companies of price collusion for allegedly raising prices repeatedly and in lockstep to match their competitors. Prices have gotten so bad that the American Diabetes Association recently launched an online petition at MakeInsulinAffordable.org, which has been signed by more than 248,000 people.

Because insulin is so expensive, some people take less than their prescribed dose, causing higher blood sugars, which may lead to preventable, very expensive complications such as kidney failure, blindness, amputation, heart attacks or even death.

Unfortunately, the American Health Care Act (AHCA) passed by the House last month would let states allow insurance companies to charge people more for preexisting conditions such as diabetes. This may leave more people unable to afford insurance and make it even more difficult for patients with already high premiums and deductibles to afford insulin.

While current law protects patients with preexisting conditions better than the AHCA would, too many people with diabetes are still going without proper medical care. One of my patients, whom I'll call "Joe" to protect his identity, lost his insurance, then developed ketoacidosis because he couldn't afford to pay \$600 monthly for two vials of insulin. He didn't die, but he required a costly stay in an intensive-care unit.

Pressure on drugmakers has started to bring small changes. But they're not enough. In response to rising costs, Novo Nordisk will limit future price increases to single-digit hikes per year. Eli Lilly will provide insulin at up to 40 percent off for patients on high-deductible plans. (The downside is that it may not count toward their deductibles.)

Drug companies also offer savings cards that lower patients' co-pays. However, these cards steer patients toward newer, more expensive insulins. And most cards may not help if the insulin the patient takes isn't on their insurance provider's formulary. Plus, such programs may save patients money, but the insurance companies don't save anything, so the costs are likely to be shifted back to patients through higher premiums, deductibles or co-pays.

Endocrinologists like me spend far too much time deciding what patients can afford instead of making sound medical decisions. I deal with these issues nearly every day. Some doctors are uncomfortable discussing costs with patients; many patients are embarrassed to admit they can't afford medication, and some won't acknowledge they aren't taking their full dosages. The physician may then increase the dose, or with Type 2 diabetes may add another drug, when the real issue is that the patient isn't taking the right amount. Since it is so common that patients cannot afford insulin, I've posted the American Diabetes

Association petition in each of my practice's exam rooms, and if patients don't bring up cost as an issue, I will frequently point to the petition as an icebreaker. I ask if they have difficulty affording their insulin and medications, and I let them know they aren't alone.

Like some other doctors, I have transitioned many patients with Type 2 diabetes onto older, less costly insulins. I try not to do that for patients with Type 1 diabetes, because these older insulins cause more dangerous low blood sugars. But sometimes I have no choice: It's either cheaper insulin or no insulin.

Our system has additional issues that may heap more straw onto patients' already strained backs – such as insurers' "quantity limits." My patient "Mike" uses 40 units of insulin per day. A box of five insulin pens contains 1,500 units and should last Paul 37 days. Since that is more than a 30-day supply, his insurer charges him a 60-day co-pay. The cutoff depends on the policy: For some, a 31-day supply will trigger a 60-day co-pay. Sometimes this problem manifests itself in reverse: "Mary" needs three vials of insulin to last at least one month. But three vials lasts her 33 days, so when she refills her prescription for a month of insulin, she is dispensed only two vials – a 22-day supply – for which her insurer charges a 30-day co-pay. Sometimes patients are allowed "up to" a 90-day supply, so they are dispensed five vials (which might work out to a 77-day supply) instead of the six vials they were prescribed (a 92-day supply). From the patient's perspective, this "co-pay overcharging" or "under-dispensing" feels like getting one dozen golden eggs for the price of two dozen.

Why do we pay so much more for insulin and other medications in the United States than people do in the rest of the world? Many factors drive prices up. Half a dozen companies may be involved with a drug before it reaches the patient, and each may mark up the cost. Unlike in many countries, there are no government-set limits on what companies can charge. These include manufacturers, wholesalers, pharmacies and pharmacy benefit managers (PBMs), which serve as the middlemen between insurers and drugmakers. PBMs negotiate which drugs are on an insurance company's formulary; they can receive a "rebate" from pharmaceutical companies when drugs make it to formularies. These "rebates" result in inflated list prices that the insurer never pays. (In other countries with nationalized health care, there's no such middleman.) When people pay a co-pay, they don't pay the list price, either. The only people who do are patients who haven't meet their deductible, are in the Medicare "donut hole" or are uninsured — and these people are the hardest hit.

We also live in one of the only two countries in the world (New Zealand is the other) that allow direct-to-consumer advertising for prescription medications. Pharmaceutical companies spend billions on advertising, and those expenses become juicy tax deductions. Finally, while many countries with single-payer systems negotiate drug prices, our Medicare system by law is barred from doing so.

All that complexity – and all the opportunities for profit – leaves patients to be squeezed by the weight of the system when they go to fill their prescriptions.

And it gets even worse. "Tim" ran out of insulin for the first time in his life last year because his insurance provider allowed him to pick up only one vial at a time, and he didn't realize he'd used it up until it was too late. "Brian," a Medicaid patient, requires six vials of insulin per month, three vials each of short-acting and long-acting varieties. Yet he, too, is not allowed to pick up more than one vial of each at a time. Medicaid won't dispense a 90-day supply, because many patients frequently change insurance, and many Medicaid providers don't want to give away a month or two of free insulin. That's understandable – insurers have a bottom line.

But properly managing diabetes requires a lot of work and can be a tremendous burden. These sorts of limitations and frequent pharmacy trips make it that much harder, and they magnify patients' anxiety about running out of insulin and getting seriously ill. Vials can fall and shatter. Insulin exposed to high or low temperatures becomes ineffective. Mail-order shipments may arrive late.

Anyone who's taking insulin should always have at least two vials on hand for emergency backup. Having only one vial is simply not safe – it creates anxiety, and can mean preventable hospital admissions or even death in some cases. It feels like driving on an eighth of a tank of gasoline in the middle of nowhere.

My experience is limited to Minnesota, and I can find no published peer-reviewed data on these practices. Internet forums discuss them often, though, and I have spoken with academic endocrinologists from both coasts who tell me my experience with patients is common in their states as well.

All of these problems could be fixed. We should require pharmacies and insurers to dispense a minimum 30-day supply and make sure patients have a second vial on hand for emergencies. Let's prorate co-pays for patients who are dispensed more than a 30- or 90-day supply, rather than rounding their co-pays up. Insurance companies could decide to do this themselves, but since they're unlikely to do so, it should be legislated at the state or federal level. We should also eliminate co-pay savings cards and require insurers to charge the lowest co-pay for insulin to encourage good blood sugars and reduce hospitalizations.

If Congress were truly serious about addressing access to lifesaving medication, it would overhaul the whole system and eliminate tax write-offs for drug advertising to consumers (or better yet, eliminate this advertising altogether), force more transparency into the pharmaceutical market and PBM rebate system, investigate those rebates and how and why PBMs and manufacturers raise prices, and allow Medicare to negotiate drug prices.

Insulin is a necessity. It's time we return to the spirit of that original \$1 patent, put people before profits, and rein in these greedy and unjust cost increases.

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